

Risk Assessments

Risk assessments are a powerful tool to ensure safe work. They are used to identify and raise awareness of hazards and to determine practical and effective controls.

Risk assessments must be carried out on all processes, experiments or preparations and should be documented. At ANSTO risk assessments are often referred to as SWMES (Safe Work Method Statements and Environmental Protection Plans)..

This page describes a simple versatile format that may be used. Assistance is available from your Local Contact or the Lab Manager.

Information to collect before you start

- Safety Data Sheets (SDSs) - SDSs for stocked laboratory chemicals are available via the ACNS Customer Portal (under Lab Chemicals).
- Details of the work and any applicable reference material.
- Previous risk assessments.
- Previous event/incident report recommendations, if available.

Basic Risk Assessment Format

- Name of person/s preparing the risk assessment
- Brief description of activity
- Person/s conducting work
- Chemicals to be used
- Equipment to be used
- Permits, licences or training requirements
- Radiation survey and monitoring requirements (please note: radioactive material must not be taken into the ACNS laboratories)

Then a table or list of:

- The individual steps involved in the work
- The hazard that could be present when performing each of those steps
- The controls for each hazard
- And the person/s responsible for implementing each control

The risk assessment should then be read and signed by the people who will be following it.

For all work in the ACNS laboratories, a risk assessment covering all activities must be submitted to the Lab Manager 4 weeks in advance for approval. No work can be carried out in the laboratories without an approved risk assessment.

Types of controls

1. Any controls used should follow the hierarchy of controls. It is always preferable to select controls from as high up this list as possible.
2. Elimination - remove the hazard (for example: remove sources of ignition when handling a flammable gas)
3. Substitution/modification - substitute with a lesser hazard (for example: less hazardous chemical)
4. Isolation - separate the hazard from people and the environment (for example: fume cupboards, shielding)
5. Engineering - devices or systems that protect against the hazard (for example: automatic shut off functions)
6. Administrative - provide appropriate training, procedures for work, signage, limit exposure times.
7. Personal Protective Equipment (PPE) - provide adequate PPE (for example: as directed by SDS or identified by risk assessment). This control should only be used in conjunction with other controls.

User Instructions

For commonly used equipment, a user instruction is available. This document briefly outlines the usage of the instrument/equipment and any safety precautions that are required.